REMARKS

Claims 1-4, 6-9, 11-15, 17-24, and 26 are pending. Claims 1, 6, 12, 17, and 21 have been amended. Claims 5, 10, 16, and 25 have been cancelled. No new matter has been added. Reexamination and reconsideration of the present application are respectfully requested.

Claim Rejection under 35 U.S.C. § 112

The Examiner rejected claim 21 under 35 U.S.C. § 112, first paragraph, stating that "the specification, while being enabling for the local IP addresses not being *directly* accessible to devices on the remote network, does not reasonably provide enablement for the local IP addresses not being accessible to devices on the remote network." (emphasis added).

Applicant has amended claim 21 to read "receive remote packets from a remote network, where the local IP addresses are not directly accessible to devices on the remote network." Accordingly, Applicant respectfully submits that the specification provides enablement for claim 21, as amended.

Claim Rejections under 35 U.S.C. § 103

The Examiner rejected claims 1-26 under 35 U.S.C. § 103 as being unpatentable over *Leung* (U.S. Pat. No. 6,195,705) in view of *Davies* (U.S. Pat. No. 6,108,701) in further view of *Genty* (U.S. Pat. No. 6,614,800).

Independent claim 1, as amended, recites:

1. (Currently Amended) A system for using Dynamic Host Configuration Protocol (DHCP) address assignments to determine a local destination address of a received packet in a Network Address Translation (NAT) environment, the system comprising:

a DHCP server to assign local Internet Protocol (IP) addresses to devices on a local network;

a remote network, wherein the local IP addresses on the local network are not directly accessible to devices on the remote network;

a NAT device to translate addresses from the remote network to the local network;

a packet device to receive packets from the remote network;[and]

an addressing device to determine the local destination address of the packets received by the packet device, wherein the addressing device uses an association table created from symbolic names of the devices on the local network and the local IP addresses associated with the devices; and

wherein the addressing device determines a symbolic name of a destination address of a device from the packet, **utilizes the association table to determine the destination address of the packet, and causes the packet to be sent to the destination address**.

Applicant has cancelled claim 5 and incorporated its limitations into claim 1. Regarding claim 5, the Examiner stated that "determining a symbolic name of a destination address of a device from the packet, utilizing the association table to determine the destination address of the packet, *and causing the packet to be sent to the destination address* is missing from Leung." (emphasis added).

The Examiner further stated that "Davies discloses in column 1, lines 61-62, a DNS server, which translates symbolic names into IP addresses on a LAN." In rejecting this claim, the Examiner stated that "It would be obvious to one skilled in the art at the time of the invention to use a DNS server to perform addressing functions. The motivation would be to use a common method of address translation (*Davies*, column 1, lines 44-47)."

Davies does not disclose that the DNS server "causes the packet to be sent to the destination address," as recited in claim 1. DNS servers perform the somewhat limited function of mapping symbolic names to IP addresses. They accept requests from other programs to convert domain names into IP addresses. They also accept requests

from other name servers to convert domain names into IP addresses. However, DNS servers to not cause packets to be sent to the destination address.

For example, when a user types a URL into a browser, the browser's first step is to convert the domain name and host name into an IP address so that the browser can request a web page from the machine at that IP address. To do this conversion, the browser sends a request to a DNS server. The DNS server may respond to the browser in three different ways:

- Answer the request with an IP address because it already knows the IP address for the domain.
- It can say, "I don't know the IP address for the domain you requested, but here's the IP address for a name server that knows more than I do."
- Or, it can return an error message because the requested domain name is invalid or does not exist.

In all of these possible responses, the DNS server returns information (the IP address, another DNS server address, or an error message) to the requesting browser. The requesting browser must then contact the server at the destination IP address. The only function of the DNS server is to determine the IP address based on the symbolic domain and host names. It does not cause the packet to be sent to the destination address. In fact, the DNS server never receives packets bound for the destination address.

Thus, when a web browser uses conventional DNS technology to contact a server, it must perform two steps. First, it must convert the symbolic domain and host names into an IP address. This step is normally performed by contacting a DNS server. Second, it must send traffic to the IP address. With conventional DNS technology, it is

not possible for a web browser or other application to send traffic directly to a symbolic name, using only one step. This is because computers on the network are identified by numeric addresses rather than symbolic names. As a result, applications requiring user-friendly symbolic names must incorporate additional code to transact with the DNS server.

This overhead is not a problem on desktop computers with ample memory and processing capacity. However, it can be disadvantageous in other settings, such as in smaller and less-powerful telephony devices. Using conventional DNS technology in these settings requires developers to make an unacceptable Hobson's choice: they can either require users to directly input difficult-to-remember IP addresses, or they can devote limited system resources to the DNS overhead.

The present invention overcomes this problem by allowing network traffic to be sent directly to a symbolic name. This has the advantage of significantly reducing demands on the requesting device. Using this invention, a handheld device operating a telephony client application can send traffic directly to a symbolic name without having to resolve an IP address or deal directly with DNS. This is accomplished by moving the symbolic name resolution functionality from the client device to an intermediate addressing device, which contains an association table. As recited in claim 1, the addressing device utilizes the association table to determine the destination address of the packet, **and causes the packet to be sent to the destination address**.

Thus, the addressing device is not simply a repackaged DNS server that responds to the requesting device with an IP address. DNS servers do not **cause the packet to be sent to the destination address**, as recited in claim 1. As noted above,

DNS servers never actually receive any information packets. Thus, Applicant respectfully submits that claim 1 distinguishes over *Davies*.

Neither *Genty* nor *Leung* make up for the deficiencies of *Davies*. *Genty* discloses keeping IP addresses hidden to provide greater network security. *Leung* discloses that address translation tables are used in networking protocols such as NAT. However, neither disclose that an "addressing device utilizes the association table to determine the destination address of the packet, **and causes the packet to be sent to the destination address,**" as recited in claim 1.

As amended, independent claims 6, 12, 17, and 21 recite limitations similar to claim 1, as amended. Accordingly, applicant respectfully submits that independent claims 6, 12, 17, and 21 distinguish over the combination of *Leung*, *Davies*, and *Genty* for reasons similar to those discussed above in regard to claim 1.

Dependent claims 2-4 depend, directly or indirectly, upon independent claim 1. Claims 7-9 and 11 depend, directly or indirectly, upon independent claim 6. Claims 13-15 depend, directly or indirectly, upon independent claim 12. Claims 18-20 depend, directly or indirectly, upon independent claim 17. And claims 22-24 and 26 depend, directly or indirectly, upon independent claim 21. Accordingly, applicant respectfully submits that dependent claims 2-4, 7-9, 11, 13-15, 18-20, 22-24, and 26 distinguish over the combination of *Leung*, *Davies*, and *Genty et al.* for reasons similar to those discussed above in regard to claim 1.

Applicant believes that the foregoing remarks place the application in condition for allowance, and a favorable action is respectfully requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call either of the undersigned attorneys at the Los Angeles telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference would advance prosecution of the application.

Respectfully submitted,

PILLSBURY WINTHROP LLP

Date: September 6, 2005

By: _____
Roger R. Wise
Registration No. 31,204
Attorney for Applicant(s)

Date: September 6, 2005

By: _____
Ryan E. Hatch
Registration No. 55,252
Attorney for Applicant(s)

725 South Figueroa Street, Suite 2800
Los Angeles, CA 90017-5406
Telephone: (213) 488-7100
Facsimile: (213) 629-1033